



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,795	08/15/2006	Karl Schermanz	16785.1	6850
22913	7590	01/18/2012		
Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111			EXAMINER DARJL PRITESH D	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 01/18/2012	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/595,795

**Applicant(s)**

SCHERMAN ET AL.

**Examiner**

PRITESH DARJI

**Art Unit**

1731

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 21-30 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 21-30 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-C1000)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemann (Investigation of... analysis) in view of Stiles (US 3,513,109).

Regarding claims 21 and 23, Kleemann teaches a process for preparation of a catalyst composition in which monolithic cordierite honeycomb was immersed in the suspension of  $\text{TiO}_2$  with 9%  $\text{WO}_3$ . Since there is not any other component present in the suspension, 91 wt%  $\text{TiO}_2$  is present in the suspension. It is obvious that slurry is formed because  $\text{TiO}_2$  and  $\text{WO}_3$  are powders and their presence in the suspension would form slurry. After impregnation sample is dried and it is impregnated with  $\text{NH}_4\text{VO}_3$ . Sample is dried and calcined. See 2. Experimental, 2.1. Absence of  $\text{SiO}_2$  makes its wt% 0, therefore the limitation is met.

Kleemann does not teach that REVO4 is contacted with the  $\text{TiO}_2$  and  $\text{WO}_3$ .

Stiles, drawn to process for applying catalytic coatings, discloses rare earth vanadate catalyst coating on the support by forming slurry (col. 8, lines 63-74). Said slurry can be applied to the surface of the support. The coating is dried

Art Unit: 1731

and calcined afterwards (col. 1, lines 44-50). Titania is used as support material (col. 2, lines 30-39).

It would have therefore been obvious to one of ordinary skill in the art at the time of invention to use rare earth vanadate catalyst of Stiles with the support material of Kleemann, motivated by the fact that catalyst materials can be adhered to support without adversely affect the catalytic activity (col. 1, lines 29-35). After coating of the catalyst is dried and calcined, it is porous, strongly adherent to the support, abrasion resistant and extremely active from a catalytic standpoint (col. 1, lines 44-50).

Regarding claims 22, 24 and 25, any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show the same process of making, see *In re Brown*, 173 USPQ 685, *In re Fessmann*, 180 USPQ 324, *In re Spada*, 15 USPQ2d 1655, *In re Fitzgerald*, 205 USPQ 594 and MPEP 2113. Absence of  $\text{SiO}_2$  makes its wt% 0, therefore the limitation is met.

Regarding claims 26-30, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on

Art Unit: 1731

the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Response to Arguments***

Applicant's arguments with respect to claims 21-25 have been considered but are moot in view of the new ground(s) of rejection. Newly cited reference Stiles (US 3,513,109) along with previously cited reference Kleemann (Investigation of... analysis) meet claimed limitations. Stiles reference discloses rare earth vanadate catalyst coating on the support by forming slurry (col. 8, lines 63-74). Said slurry can be applied to the surface of the support. The coating is dried and calcined afterwards (col. 1, lines 44-50). Titania is used as support material (col. 2, lines 30-39). Previously send non-final rejection respectfully withdrawn, therefore instant action is labeled as second non-final rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRITESH DARJI whose telephone number is (571)270-5855. The examiner can normally be reached on Monday to Thursday 8:00AM EST to 6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorenzo can be reached on 571-272-1233. The fax

Art Unit: 1731

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. D./  
Examiner, Art Unit 1731

/J.A. LORENZO/  
Supervisory Patent Examiner, Art Unit 1731